

Patent Abstracts of Japan

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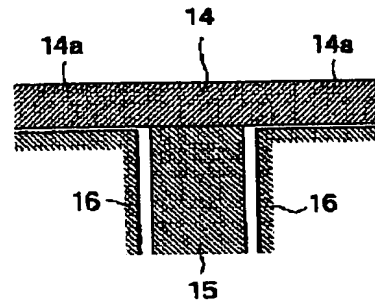
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APPLICANT : SHOWA ALUM CORP;

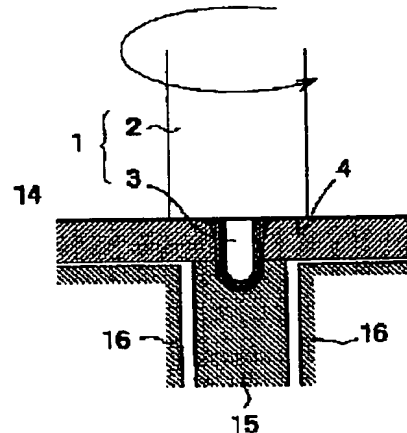
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TITLE : FORMATION OF T-JOINT WITH  
FRICTION STIRRING JOINING



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ABSTRACT : PROBLEM TO BE SOLVED: To form a T-joint excellent in the combining precision and the outward appearance by combining two works having desired size and shape to T-shape state inserting a rotor for joining from the back side of the work and joining.

SOLUTION: An aluminum plate is used as a blank and (a) to the middle part in the width direction of a first work 14 directed to the horizontal direction, the upper edge part of the second work 15 directed to the vertical direction is combined as the T-shape state. Under this state, (b) a probe 3 projected at the tip part of the rotor 1 for joining is inserted into the thickness part of the second work 15 from the back side of the first work 14 and joined. At the joining time, it is desirable to prevent the deformation of the first work 14 caused by softening of the material at the time of joining by supporting both arms 14a, 14b of the first work 14 with a jig 16 from the lower side thereof. Then, a method, in which a recessed part is arranged at the center part side of the first work and the second work is fitted therein and positioned and joined, etc., can be adopted.

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